

## General

### Title

Preventive and developmental health care for young children: proportion of children who received all individual care components measures in the Promoting Healthy Development Survey (PHDS).

### Source(s)

Bethell C, Peck C, Schor E. Assessing health system provision of well-child care: the Promoting Healthy Development Survey. *Pediatrics*. 2001 May;107(5):1084-94. [PubMed](#)

Bethell C, Reuland CH, Halfon N, Schor EL. Measuring the quality of preventive and developmental services for young children: national estimates and patterns of clinicians' performance. *Pediatrics*. 2004 Jun;113(6 Suppl):1973-83. [PubMed](#)

Child and Adolescent Health Measurement Initiative (CAHMI). Bethell C, Peck Reuland C, Walker C, Brockwood K, Latzke B, Read D. In-office administration of the promoting healthy development survey - reduced-item version. Portland (OR): CAHMI - The Child and Adolescent Health Measurement Initiative; 79 p.

Child and Adolescent Health Measurement Initiative (CAHMI). Promoting healthy development survey - PLUS (PHDS-PLUS). Portland (OR): CAHMI - The Child and Adolescent Health Measurement Initiative; various p.

Child and Adolescent Health Measurement Initiative (CAHMI). The promoting healthy development survey. Portland (OR): CAHMI - The Child and Adolescent Health Measurement Initiative; 2001. 16 p.

## Measure Domain

### Primary Measure Domain

#### Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

### Secondary Measure Domain

#### Patient Experience

# Brief Abstract

## Description

This measure is used to assess the proportion of children who received all individual care components measures in the Promoting Healthy Development Survey (PHDS).

Note: A composite score is calculated in which a higher score indicates better quality.

## Rationale

The Promoting Healthy Development Survey (PHDS) measures various aspects of health care that are recommended by the American Academy of Pediatrics (AAP) and the Maternal Child Health Bureau. This measure provides information about how many children receive all of the recommended care components. Therefore, it provides information about the degree to which children are receiving all aspects of recommended care.

This measure reflects the interests of parents, the comprehensive care which is recommended, and is sensitive to assessing improvements. Significant opportunities for improvement exist in ensuring that young children and families receive recommended preventive and developmental health care services. A growing body of literature supports the delivery of parental anticipatory guidance, assessment follow-up on the development of children, and assessment of the psychosocial well-being of families. Few quality measures have been available that provide specific information about preventive health care for young children, especially on aspects of care for which parents and families are a reliable source of information about the quality of their child's health care. The PHDS provides direct feedback from parents about the delivery and quality of preventive services for their children.

The PHDS was developed for the purpose of assisting providers, consumers, purchasers, and policymakers in assessing the degree to which health plans and practitioners provide developmental services as recommended in guidelines set forth by the American Academy of Pediatrics and the Maternal and Child Health Bureau's Bright Futures initiative.

## Primary Clinical Component

Preventive and developmental health care for young children

## Denominator Description

Children age 3 months to 48 months who received a well-child visit in the last 12 months and whose parents have scores to each of the core Promoting Healthy Development Survey (PHDS) quality measures assessing specific care components

## Numerator Description

Children who received all of the individual care components (see the related "Numerator Inclusions/Exclusions" field)

## Evidence Supporting the Measure

## Evidence Supporting the Criterion of Quality

A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence

Focus groups

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

## Evidence Supporting Need for the Measure

### Need for the Measure

Overall poor quality for the performance measured

Use of this measure to improve performance

## Evidence Supporting Need for the Measure

Bethell C, Peck C, Abrams M, Halfon N, Sareen H, Scott Collins K. Partnering with parents to promote the healthy development of young children enrolled in Medicaid: results from a survey assessing the quality of preventive and developmental services for young children enrolled in Medicaid in three states. Washington (DC): The Commonwealth Fund; 2002 Sep. 72 p.

Bethell C, Peck C, Schor E. Assessing health system provision of well-child care: the Promoting Healthy Development Survey. Pediatrics. 2001 May;107(5):1084-94. [PubMed](#)

Bethell C, Reuland CH, Halfon N, Schor EL. Measuring the quality of preventive and developmental services for young children: national estimates and patterns of clinicians' performance. Pediatrics. 2004 Jun;113(6 Suppl):1973-83. [PubMed](#)

## State of Use of the Measure

### State of Use

Current routine use

### Current Use

Collaborative inter-organizational quality improvement

External oversight/Medicaid

Internal quality improvement

National reporting

Quality of care research

## Application of Measure in its Current Use

### Care Setting

Ambulatory Care

## Professionals Responsible for Health Care

Advanced Practice Nurses

Nurses

Physician Assistants

Physicians

## Lowest Level of Health Care Delivery Addressed

Individual Clinicians

## Target Population Age

Children age 3 months to 48 months

## Target Population Gender

Either male or female

## Stratification by Vulnerable Populations

Unspecified

# Characteristics of the Primary Clinical Component

## Incidence/Prevalence

Unspecified

## Association with Vulnerable Populations

Unspecified

## Burden of Illness

Unspecified

## Utilization

Unspecified

## Costs

Unspecified

# Institute of Medicine (IOM) Healthcare Quality Report Categories

## IOM Care Need

Staying Healthy

## IOM Domain

Effectiveness

Patient-centeredness

## Data Collection for the Measure

### Case Finding

Users of care only

### Description of Case Finding

Children age 3 months to 48 months who received a well-child visit in the last 12 months

### Denominator Sampling Frame

Patients associated with provider

### Denominator Inclusions/Exclusions

#### Inclusions

Children age 3 months to 48 months who received a well-child visit in the last 12 months and whose parents have scores to each of the core Promoting Healthy Development Survey (PHDS) quality measures assessing specific care components

#### Exclusions

Unspecified

### Relationship of Denominator to Numerator

All cases in the denominator are equally eligible to appear in the numerator

### Denominator (Index) Event

Encounter

Patient Characteristic

## Denominator Time Window

Time window precedes index event

## Numerator Inclusions/Exclusions

### Inclusions

Children who received all of the individual care components

From the responses, a composite measure score is calculated\* in which a higher score is associated with better quality.

\*Note: Scoring process:

For each individual care component in the Promoting Healthy Development Survey (PHDS) (12 quality measures specific to specific care components are eligible to be included [e.g., Anticipatory Guidance and Parental Education, Asking about and Addressing Parental Concerns], most users only include the process of care measures and not the experience of care measures), binomial variables are created that indicate whether the child received a sufficient level of quality care for the specific aspect of care.

The mean is then calculated across these binomial variables.

Those with mean score that is equal to the child having received all aspects of care (mean = 100) are identified and they are recoded to 100.

Those whose mean score is less than 100 are recoded to 0.

### Exclusions

Unspecified

## Measure Results Under Control of Health Care Professionals, Organizations and/or Policymakers

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

## Numerator Time Window

Encounter or point in time

## Data Source

Patient survey

## Level of Determination of Quality

Individual Case

## Pre-existing Instrument Used

Unspecified

## Computation of the Measure

## Scoring

## Interpretation of Score

Better quality is associated with a higher score

## Allowance for Patient Factors

Analysis by high-risk subgroup (stratification on vulnerable populations)

Analysis by subgroup (stratification on patient factors, geographic factors, etc.)

## Description of Allowance for Patient Factors

Although no stratification is required, the Promoting Healthy Development Survey (PHDS) includes a number of variables that allow for stratification of the findings by possible vulnerability:

- Child demographic characteristics (e.g., the child's age, race)

- Child health and descriptive characteristics (e.g., children at high risk for developmental, behavioral or social delays, special health care needs)

- Parent health characteristics (e.g., children whose parents are experiencing symptoms of depression)

## Standard of Comparison

External comparison at a point in time

External comparison of time trends

Internal time comparison

## Evaluation of Measure Properties

### Extent of Measure Testing

2000: A Majority of the PHDS Included in the National Survey of Early Childhood Health (NSECH)

Psychometric analyses demonstrated that the PHDS quality measure scales have strong construct validity and internal consistency (reliability). These findings are displayed in the article, "Measuring the quality of preventive and developmental services for young children: National estimates and patterns of clinicians' performance."

2001-2003: Development and Implementation of the Provider-Level PHDS. October 2001-March 2003

Focus groups and cognitive interviews with 35 health care providers in Vermont and Washington and 20 parents of young children in Vermont to inform item-reduction, administration specifications, and reporting templates.

Psychometric analyses demonstrated that the PHDS quality measure scales have strong construct validity and internal consistency (reliability). These findings are displayed in the CAHMI reports, "Overview of the Round 1 Implementation of the PHDS in Mousetrap" and "University Pediatrics: Round 2 -- In-Office Implementation of the PHDS Key Findings."

2002-2004: Implementation by Telephone in Four Medicaid Agencies

Psychometric analyses demonstrated that the PHDS quality measure scales have strong construct validity and internal consistency (reliability). These findings are displayed in the CAHMI report, "Hearing the Voices of Parents: Results from a Survey Assessing the Quality of Preventive and Developmental Services for Young Children Enrolled in Medicaid in Four States."

December 2003 - March 2004 Implementation of the PHDS in Kaiser Permanente, System, Office and Provider-Level Analysis Conducted

Psychometric analyses demonstrated that the PHDS quality measure scales have strong construct validity and internal consistency (reliability). These findings are displayed in the draft publication, "What drives the quality of preventive and development services provided to young children? Findings from a multi-level, provider and patient-centered method to assess quality."

Fall 2003 - August 2004 Implementation of the ProPHDS in the Healthy Development Collaborative

ProPHDS administered by mail and in-offices. Psychometric analyses demonstrated that the PHDS quality measure scales have strong construct validity and internal consistency (reliability). These findings are displayed in the draft publication, "Assisting primary care practices in using office systems to promote early childhood development."

January - March 2006 Implementation of Three Boston-area Community Health Centers

Psychometric analyses demonstrated that the PHDS quality measure scales have strong construct validity and internal consistency (reliability). These findings are displayed in the draft publication, "Associations of Language and Cultural Competence with Latino Parents' Views of Their Children's Well Child Care."

## Evidence for Reliability/Validity Testing

Bethell C, Peck C. Medicaid parents experience with the health care system: summary of findings from a survey of parents of young children enrolled in Medicaid in three ABCD states. New York (NY): Commonwealth Fund; 2001.

Bethell C, Reuland CH, Halfon N, Schor EL. Measuring the quality of preventive and developmental services for young children: national estimates and patterns of clinicians' performance. *Pediatrics*. 2004 Jun;113(6 Suppl):1973-83. [PubMed](#)

Child and Adolescent Health Measurement Initiative (CAHMI). Overview of the round 1 implementation of the PHDS in mousetrap and university pediatrics. Portland (OR): Child and Adolescent Health Measurement Initiative (CAHMI); 27 p.

Child and Adolescent Health Measurement Initiative (CAHMI). What drives the quality of preventive and development services provided to young children? Findings from a multi-level, provider and patient-centered method to assess quality. Portland (OR): Child and Adolescent Health Measurement Initiative (CAHMI); 2006. 38 p. [60 references]

Reuland C, Bethell C. Hearing the voices of parents: measuring and improving preventive and developmental services provided to young children. Portland (OR): Child and Adolescent Health Measurement Initiative (CAHMI); 2004 Jun. 97 p.

## Identifying Information

Original Title



Composite measure of preventive and developmental health care for young children: proportion of children who received all care components.

## Measure Collection Name

Promoting Healthy Development Survey (PHDS)

## Measure Set Name

Preventive and Developmental Health Care for Young Children

## Composite Measure Name

Proportion of Children Who Received All Care Components

## Submitter

Child and Adolescent Health Measurement Initiative - Nonprofit Organization

## Developer

Child and Adolescent Health Measurement Initiative - Nonprofit Organization

## Funding Source(s)

The Commonwealth Fund

## Composition of the Group that Developed the Measure

Christina Bethell, PhD, MBA, MPH; Colleen Reuland, MS; Brooke Latzke, BS

## Financial Disclosures/Other Potential Conflicts of Interest

None

## Endorser

National Quality Forum - None

## Adaptation

Measure was not adapted from another source.

## Release Date

2001 Jan

## Revision Date

2006 Dec

## Measure Status

This is the current release of the measure.

## Source(s)

Bethell C, Peck C, Schor E. Assessing health system provision of well-child care: the Promoting Healthy Development Survey. *Pediatrics*. 2001 May;107(5):1084-94. [PubMed](#)

Bethell C, Reuland CH, Halfon N, Schor EL. Measuring the quality of preventive and developmental services for young children: national estimates and patterns of clinicians' performance. *Pediatrics*. 2004 Jun;113(6 Suppl):1973-83. [PubMed](#)

Child and Adolescent Health Measurement Initiative (CAHMI). Bethell C, Peck Reuland C, Walker C, Brockwood K, Latzke B, Read D. In-office administration of the promoting healthy development survey - reduced-item version. Portland (OR): CAHMI - The Child and Adolescent Health Measurement Initiative; 79 p.

Child and Adolescent Health Measurement Initiative (CAHMI). Promoting healthy development survey - PLUS (PHDS-PLUS). Portland (OR): CAHMI - The Child and Adolescent Health Measurement Initiative; various p.

Child and Adolescent Health Measurement Initiative (CAHMI). The promoting healthy development survey. Portland (OR): CAHMI - The Child and Adolescent Health Measurement Initiative; 2001. 16 p.

## Measure Availability

The individual measure, "Composite Measure of Preventive and Developmental Health Care for Young Children: Proportion of Children who Received All Care Components," is published in "Promoting Healthy Development Survey (mail version)," "In-office Administration of the Promoting Healthy Development Survey - Reduced-item Version (office version)," and "Promoting Healthy Development Survey - PLUS (PHDS-PLUS) (telephone version)." This survey is available from the [Child and Adolescent Health Measurement Initiative \(CAHMI\) Web site](#) .

For further information, please contact the Child and Adolescent Health Measurement Initiative (CAHMI) at: 707 SW Gaines Street, Portland, OR 97239-3098; Phone: 503-494-1930; Fax: 503-494-2473; Web site: [www.cahmi.org](http://www.cahmi.org) .

## Companion Documents

The following are available:

Child and Adolescent Health Measurement Initiative (CAHMI). The promoting healthy development survey: implementation guidelines. Portland (OR): CAHMI - The Child and Adolescent Health Measurement Initiative, Oregon Health & Science University; 179 p. This document is available in Portable Document Format (PDF) from the [Child and Adolescent Health Measurement Initiative \(CAHMI\) Web site](#) .

Child and Adolescent Health Measurement Initiative (CAHMI). The promoting healthy development

survey - PLUS: implementation guidelines. Portland (OR): CAHMI - The Child and Adolescent Health Measurement Initiative, Oregon Health & Science University; 320 p. This document is available in PDF from [CAHMI Web site](#) .

## NQMC Status

This NQMC summary was completed by ECRI Institute on November 28, 2007. The information was verified by the measure developer on January 3, 2008.

## Copyright Statement

© CAHMI - Child and Adolescent Health Measurement Initiative

The Child and Adolescent Health Measurement Initiative (CAHMI) quality measure tools (including sampling, administration, analysis and reporting specifications) are available for free on the CAHMI Web site ([www.cahmi.org](http://www.cahmi.org) ) thanks to past and current support from the Packard Foundation, Commonwealth Fund and the Robert Wood Johnson Foundation. All CAHMI quality measures are copyrighted by the CAHMI. Should you use any of the material from NQMC, please reference it appropriately.

## Disclaimer

### NQMC Disclaimer

The National Quality Measures Clearinghouse<sup>®</sup> (NQMC) does not develop, produce, approve, or endorse the measures represented on this site.

All measures summarized by NQMC and hosted on our site are produced under the auspices of medical specialty societies, relevant professional associations, public and private organizations, other government agencies, health care organizations or plans, individuals, and similar entities.

Measures represented on the NQMC Web site are submitted by measure developers, and are screened solely to determine that they meet the [NQMC Inclusion Criteria](#).

NQMC, AHRQ, and its contractor ECRI Institute make no warranties concerning the content or its reliability and/or validity of the quality measures and related materials represented on this site. Moreover, the views and opinions of developers or authors of measures represented on this site do not necessarily state or reflect those of NQMC, AHRQ, or its contractor, ECRI Institute, and inclusion or hosting of measures in NQMC may not be used for advertising or commercial endorsement purposes.

Readers with questions regarding measure content are directed to contact the measure developer.